

## Remarks

This Application has been carefully reviewed in light of the Office Action mailed July 26, 2005. In the Office Action, claims 1-11, 13, 14, and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Schneider* (U.S. Patent No. 3,415,314) in view of *Helsemans* (U.S. Patent No. 5,418,261).

By this paper, Applicant has amended claims 1-4, 6, 9, 11, and 14, and added claims 27-30 to clarify the subject matter in which the Applicant claims as its invention and to advance prosecution of this case. No new matter has been introduced by this Amendment. Applicant does not admit that the Amendment was necessary as the result of any cited art or Examiner objections or rejections. Applicant respectfully requests reconsideration of the above-identified application in view of the following remarks.

Claims 1-11, 13, 14, and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Schneider* in view of *Helsemans*. Applicant respectfully traverses this rejection because assuming that the *Schneider* and *Helsemans* can be combined, the proposed combination does not teach, disclose or suggest the claimed invention.

The proposed *Schneider-Helsemans* combination does not teach, disclose or suggest the pending claims of the present invention. By way of example and not limitation, the Examiner's attention is directed to Applicant's independent claim 1 which recites "the SMF structure ... is hydrophobic." The Examiner admits that *Schneider* does not teach, disclose or suggest a hydrophobic foam. Likewise, *Helsemans* does not teach, disclose or suggest a hydrophobic foam. To the contrary, the foams disclosed in *Helsemans* are prepared with polyoxyalkylene polyols containing oxyethylene residues. (Col. 1, Lines 57-58.) Foams prepared using oxyethylene (ethylene oxide) based polyols absorb water and are therefore hydrophilic. For example, "poly(oxyethylene)glycols, which contain the hydrophilic moiety (polyoxyethylene groups), are responsible for the hydrophilicity of the polymer network." Haschke, E., et al., Clear Nonionic Polyurethane Hydrogels For Biomedical Applications,

New Orleans, Proceedings of the SPI 34th Annual Technical/Marketing Conference, p. 94, 1992. See also, Harrington, R., et al., "Chapter 9: Slabstock Foam" in: Flexible Polyurethane Foams (United States, The Dow Chemical Company, 1997) p. 9.30 ("Extremely soft, low density hydrophilic foams can be produced without the use of additional blowing agents using a 75/25 combination of high EO in conventional type of polyols."); Frisch, K.C., "Chapter 31: High-Performance Polyurethanes" in: Hatada, K. et al., Macromolecular Design of Polymeric Materials (New York, Marcel Dekker, 1997), p. 529; and Saunders, J.H. and Frisch, K.C., "Chapter VII: Flexible Foams" in: Polyurethanes, Chemistry and Technology (New York, John Wiley & Sons, 1964), p. 173.<sup>1</sup> Conversely, Applicant's claimed invention is drawn to shape memory foams that are hydrophobic. The hydrophobic nature of the Applicant's claimed foams allow them to be used in many applications where hydrophilic foams are unsuitable. For at least this reason, pending claims 1-11 and 14 are patentable over the proposed combination and the other art of record.

Additionally, Applicant's independent claim 27 is directed at a shape memory foam polymeric composition produced by reacting an isocyanate and an "aromatic polyester polyol." Applicant's independent claim 29 recites reacting an isocyanate with a "polycarbonate polyol." The *Schneider* reference does not teach, disclose or suggest these limitations. The *Helsemans* reference also does not teach, disclose or suggest the use of either aromatic polyester or polycarbonate polyols in the production of shape memory foams. To the contrary, the *Helsemans* reference is limited to foams prepared with polyoxyalkylene polyols containing oxyethylene residues wherein an average oxyethylene content of at least 86% by weight. For at least these reasons, claims 27-30 are patentable over the proposed combination and the other art of record.

---

<sup>1</sup> In compliance with the duty of disclosure, the Applicant is filing an Information Disclosure Statement citing to the above four references. The citation of these references is not to be construed as an admission that any of the references are material as defined under 37 C.F.R. § 1.56(b).

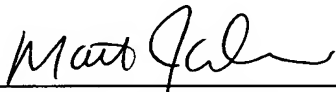
### **Conclusion**

In view of the above, Applicant respectfully submits that the application is in condition for allowance, which allowance is respectfully submitted.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Matthew M. Jakubowski, Attorney for Applicant, at Examiner's convenience at (248) 358-4400.

Respectfully submitted,

**VAHID SENDIJAREVIC**

By   
Matthew M. Jakubowski  
Reg. No. 44,801  
Attorney for Applicant

Date: November 28, 2005

**BROOKS KUSHMAN P.C.**  
1000 Town Center, 22nd Floor  
Southfield, MI 48075-1238  
Phone: 248-358-4400  
Fax: 248-358-3351